

[NEAR NET SHAPE COIL SUPPORT STRUCTURE]

Abstract of Disclosure

A superconducting magnet support structure is provided. The support structure includes an exterior portion and an interior portion. The exterior portion has multiple shoulders and multiple pockets. The shoulders and pockets are dimensioned corresponding to dimensions of a superconducting magnet. The interior portion has a base coupled to the shoulders. The exterior portion and the interior portion contain roving at approximately 0 ° and 90 ° directions relative to a center axis extending through the support structure. A method of fabricating the support structure is also provided including applying an integrated multi-layer glass tape to a preformed support tooling during a wet winding process.

Figures